

Experience

Technical Leader I, Cisco Systems

Oct 2021 – Present

Manageability service **Technologies** – Go, gRPC, Python, C

- Architected and implemented secure device management features using industry-standard gRPC technologies (gNMI, gNOI, gNSI), enhancing operational efficiency and security.
- Led design and development of critical Cisco Manageability services, including:
 - Access Control Layer (ACL) implementation utilizing AuthZ and gNSI Authz services for comprehensive policy management
 - SPIFFE-based authentication and authorization framework, elevating security posture
 - Key architect and primary point of contact for multiple gNSI services including CertZ, CredentialZ, and BootZ
 - Successfully implemented BootConfig gNOI service to streamline device initialization
- Developed scalable services enabling seamless device management throughout the entire lifecycle (Day 0 to Day N), facilitating efficient transitions between multiple operational teams
- Optimized MGBL services for horizontal scalability and reliability, successfully increasing service availability to 99% uptime

Senior Software Engineer, Cisco Systems

Sep 2019 – Jan 2022

- Designed and implemented support Secure ZTP (RFC 8572) and a compliant server.
- Defined workflows for Ownership Voucher (OV) (RFC 8366) Generation and Distribution.
- Major contributor in Design of Manufacturer Authorized Signing Authority to generate OVs

Software Engineer III, Cisco Systems

Jun 2015 – Sep 2019

Zero Touch Provisioning **Technologies** – Python, bash, Docker

- Re-engineered the existing infrastructure, which increase the provisioning speed by 30%.
- Helped increase the feature velocity for that component with code and state coverage of ~80%, reducing the operational costs by 10-fold for the customers.

SPNAC **Technologies** – Go, InfluxDB, Kapacitor, Docker

- Closed-loop Network automation using telemetry data from switches/routers.
- A network health monitoring app with auto remediation.

Telemetry **Technologies** – C, Python.

- Designed and implemented infra and backend for event/data collection on Nexus devices.

Java Developer, Kavi Associates

Jun 2013 – Jun 2015

Locomotive Road Failure Prediction **Technologies** – Cloudera, SpringMVC, Hibernate, Spark, SAS

- Implemented streaming service to gather real-time data from various locomotive sensors and streamed them to HDFS.

Pretium **Technologies** - Java, Python, Scala, Spring MVC, Ajax, Hibernate., HighCharts.

- Implemented a code generator for data collection, cleaning, integration, ETL and data viz.

Full-Stack Developer, XL Academics **Technologies** - php, mysql, amcharts

Feb 2012 – May 2013

- Implemented chat, financial manager and spend analyzer like Mint.com for FMHS users.

Education

- M.S in Computer Science - **Northern Illinois University** (GPA – 4.0/4.0)
- Bachelor of Engineering - **JNTU Kakinada, India** (GPA – 3.6/4.0)

May 2013

April 2011

Technical Skills

- Languages: C, Go, python, Objective-C, SQL
- Databases: MySQL, PostgreSQL, InfluxDB, Prometheus.

Certifications

- Deep Learning Nano Degree Foundation Program
- Cloudera Certified Administrator for Apache Hadoop (CCA)

Side Projects

- OpenCV: Face recognition, Emotion recognition, Object tracking, Motion detector.
- Digital augmentation(image overlay) of image/videos on a paper, placed in front of a camera.
- Deep learning: Image Classification, Face Generator, Language Translation, TV Script Generation, Image styling
- Tekken-py: Python playing Tekken 7.